News



Virginia Board of Education Seeks Input on Initiatives

The Virginia Board of Education is seeking community input during a series of public hearings this summer as it examines how best to prepare students for academic and career success. The public hearings will focus on the following topics:

- Development of the Profile of a Virginia Graduate, including changes to high school graduation requirements and future accreditation models;
- Implementation of the federal Every Student Succeeds Act (ESSA) and Virginia's accountability system;
- Recommendations regarding the Standards of Quality (SOQ); and
- Identifying conditions and needs of public education for inclusion in the board's comprehensive plan and annual report to the Governor and General Assembly.

For more information about the initiatives, please go to Virginia Educational Initiatives

Tuesday, July 19 - Williamsburg-James City County

6:30 p.m. Lafayette High School (Auditorium) 4460 Longhill Road Williamsburg, VA 23188

Wednesday, August 24 - Abingdon

6:30 p.m.
Southwest Virginia Higher Education Center
One Partnership Cir, Abingdon, VA 24210

Thursday, August 25 – Lynchburg

6:30 p.m. Heritage High School 3020 Wards Ferry Road Lynchburg, VA 24502



Science Practice Items in TestNavTM 8

<u>Superintendent's Memo #294-15</u> informed school division staff that existing Standards of Learning (SOL) practice item sets on the Virginia Department of Education (VDOE) Web site would be made available in the new TestNavTM 8 delivery software.

The Grades 6 through 8 Mathematics and Reading and Grade 8 Science practice item sets, as well as the Civics & Economics, Grade 8 Writing, and End-of-Course (EOC) Writing practice item sets are now available in TestNav 8. The practice item sets and Practice Writing Tool are accessible through the installable TestNav 8

<u>application</u>. The downloadable application varies by operating system and is available for certain desktop computers, laptops, and tablets. Instructions for installing the TestNav 8 application are available on the VDOE Web site.

A previously posted document, <u>Introduction to TestNav 8: Multiple Choice/Technology-Enhanced Item Tests</u>, and a newly posted document, <u>Introduction to TestNav 8: Writing Tool</u>, are also available on the VDOE Web site. These documents provide additional information on TestNavTM 8 such as system requirements, downloading the TestNav 8 application, opening the practice item sets and Practice Writing Tool, navigating through the TestNav 8 screens, answering test questions, using the online tools, and using the accessibility features.

School staff are strongly encouraged to use the information found in the *Introduction to TestNav 8* documents in conjunction with the information found in the *Guided Practice Suggestions* documents that are available for each practice item set and for the Practice Writing Tool. The *Guided Practice Suggestions* documents provide specific information for each item in the practice item sets and specific information for teachers as they guide students through the practice items or the Practice Writing Tool. Following the suggestions in these guides will ensure that students are exposed to the different tools within TestNav 8 and the different functionality features of technology-enhanced items.

School divisions will be notified when other end-of-course practice items are available in the TestNav 8 application. School division staff are encouraged to discuss a plan to familiarize teachers and students with the new test delivery system prior to the administration of SOL tests during the 2016-2017 school year.

If you have any questions, please contact the student assessment staff by e-mail at Student Assessment@doe.virginia.gov or by phone at (804) 225-2102.

Change the Equation Survey Results- A new survey of American teenagers from the Amgen Foundation and Change the Equation finds that teens like science and would welcome the opportunity to do more engaging, hands-on science in school. Yet the survey also reveals that teens lack access to real-world science experiences, out-of-school opportunities, and professional mentors, which is limiting their chances to pursue science any further. For more information concerning the survey, go to Change the Equation.

Teacher Opportunities

2016 Virginia Association of Science Teachers (VAST) Professional Development Institute (PDI)

The VAST PDI theme is The Faces of Science in Virginia. It builds upon last year's PDI theme Designing Inquiring Minds. The Faces of Science showcases the rich Virginia science resources that are available to you through the many science organizations and companies in Virginia. For a full description of the theme and strands, visit http://www.vast.org/presenters.html. The VAST Professional Development Institute will be held from **November 17-19** in Williamsburg, VA.

The Chesapeake Bay Trust Mini Grant Program was established to provide accessible funds to schools, organizations, and agencies for pre-K-12 Environmental Education to educate students about their local watersheds and how they can become environmental stewards and make a difference in watershed health. To accomplish this goal the program supports meaningful outdoor learning experiences around a watershed issue investigation including field trips, fieldwork, student-led action projects and schoolyard habitat projects as well as building teacher capacity to implement environmental education including professional development trainings and programs to advance environmental literacy in the Chesapeake Bay region. Up to \$5,000 can be awarded. Apply by August 5, 2016

Earth Science Week 2016 Toolkits

Earth Science Week 2016 Toolkits are available for advance orders now! The kit contains everything you need to prepare for Earth Science Week (October 9-15, 2016), which celebrates the theme "Our Shared Geoheritage. To ensure that you are among the first to receive these educational resources, order yours today. The Toolkit will ship starting in mid-August 2016. If the kits are pre-ordered the cost is \$7.95 which includes shipping. Bulk discounts are available for orders of multiple kits. For ordering, special shipping, bulk orders, and more information, visit http://www.earthsciweek.org/materials or phone AGI Publications at 703-379-2480.

NASA Langley's Annual Youth Day

NASA Langley's Office of Education is looking for volunteers to do NASA hands-on activities during NASA Langley's Annual Youth Day. The event will take place on Tuesday, August 2nd from 9am – 2pm at NASA Langley Research Center in Hampton, VA. The ages of students expected at this event are 5 to 12 year olds. All volunteers will receive hours of professional development for every hour they participate with us. If you would like to volunteer or have any questions please contact NASA Education Specialist Marilé Colón Robles at Marile.ColonRobles@nasa.gov or 757-864-8672.

National Park Service Teacher Workshop

Shenandoah National Park will present the 2nd-6th grade Teacher Workshop on Friday, September 30, 2016, from 9am-3pm. At this free workshop, teachers will learn how to incorporate the park's 2nd – 6th grade programs into their classroom lesson plans. Park rangers will familiarize teachers with Shenandoah National Park and the program materials, introduce classroom pre-visit and post-visit activities, demonstrate ranger-led activities planned for the students, and define the responsibilities of teachers, rangers, students, and chaperones on field trips. Workshop attendance is required before bringing students on a park program. To register, or for more information, call the Shenandoah National Park Education Office at 540-999-3500, ext. 3489, or email shen_education@nps.gov.

Virginia Tech Week of Science!

Please join Virginia Tech for a week of exciting STEM exhibits, presentations, and hands-on activities! The Week of Science starts on Friday, September 30 with a school preview day at the Science Museum of Western Virginia in Roanoke. Saturday, October 1 will be a maker event at the National Capital Region. Sunday, October 2 and Monday, October 3 will be the Southwest Virginia STEM Summit, a teacher professional development and regional economic development event. The Virginia Tech Science Festival will be held in Blacksburg on Saturday, October 8. Program and registration for the STEM Summit: http://www.cpe.vt.edu/swvstem/

Student Opportunities

Apply for a GreenWorks! Environmental Education Grant by Sept. 30

Project Learning Tree offers grants up to \$1,000 to schools and youth organizations for environmental service-learning projects that link classroom learning to the real world. Students implement an action project they help design to green their school or to improve an aspect of their neighborhood's environment. The projects partner students with their whole school, local businesses and/or community organizations, and provide opportunities for student leadership. For more info, please go to Project Learning Tree.

Virginia is for Lovers of Summer Learning

The Virginia Department of Education has provided a web based resource for students and parents with different summer learning opportunities for students. These resources are provided for all different grade

levels and academic areas. Refer students to <u>Virginia Is for Lovers of Summer Learning</u> if they are interested in enriching their understanding of science over the summer!

Articles

What We Call Misconceptions May Be Necessary Stepping-Stones Toward Making Sense of the World-this article emphasizes the importance of examining student misconceptions and correcting them with sense-making activities. The research suggests using activities that engage students in science and engineering practices that will help them develop their understanding of disciplinary core ideas and cross-cutting concepts and, subsequently, the world around them.

Gene Drives on the Horizon: Advancing Science, Navigating Uncertainty, and Aligning Research with Public Values (2016)- Research on gene drive systems is rapidly advancing. Many proposed applications of gene drive research aim to solve environmental and public health challenges, including the reduction of poverty and the burden of vector-borne diseases, such as malaria and dengue, which disproportionately impact low and middle income countries. However, due to their intrinsic qualities of rapid spread and irreversibility, gene drive systems raise many questions with respect to their safety relative to public and environmental health. Because gene drive systems are designed to alter the environments we share in ways that will be hard to anticipate and impossible to completely roll back, questions about the ethics surrounding use of this research are complex and will require very careful exploration. Download this publication for free at National Academy Press.

Highlighted Superintendent's Memos

MEMO 176-16
 2016 General Assembly Revisions to the Standards of Quality

Contact Us

As always, please contact one of VDOE Science Team if you have questions.

Jim Firebaugh (Jim.Firebaugh@doe.virginia.gov)

Tina Mazzacane (Tina.Mazzacane@doe.virginia.gov)

Anne Petersen (anne.petersen@doe.virginia.gov)

Eric Rhoades (Eric.Rhoades@doe.virginia.gov)